

## Section of the History of Medicine

President W Hartston FRCP

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### Papers

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#### Robert Bentley Todd's Contributions to Medicine

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Dr Robert Bentley Todd was born in Dublin on 9 April 1809 and died in his London consulting room on 30 January 1860. In his short life of fifty years he accomplished an enormous amount of constructive work yet he is most commonly remembered as the intoxicated physician, rolling in his carriage to visit patients equally intoxicated by the quantities of alcohol he had prescribed for them.

Unhappily, this picture is not overdrawn. Todd drank to excess, while the case notes of King's College Hospital reveal that he often ordered his patients a pint and a half of brandy a day in addition to wine and porter. To us, such treatment is absurd but, before scoffing too loudly, we should remember that Todd was overreacting against an even more dangerous system. He started his career while the depletive or antiphlogistic method was still in common use. He had seen, for instance, a consumptive patient submitted to regular bleeding, purging and starvation. It was not Todd but his old teacher, Robert Graves of the Richmond Hospital, Dublin, who first rebelled against this treatment and who advocated a supporting regimen, of which Todd became the chief exponent. Nourishing food, quantities of strong beef tea, and the most readily assimilated pabulum, alcohol, replaced attempts to cure disease by lowering the patient's vitality. It may not have done much good but was surely less harmful to the poverty-stricken inmate of a London hospital in the 1830s and 1840s than was purging and starvation. So closely is the name of Todd linked with the virtues

of alcohol that the word 'toddy' has sometimes been derived from his name. This is incorrect for the term comes from the Hindustani and was applied to a drink of spirits with hot water and sugar prior to 1786. However, Todd did give his name to a potion or mixture, a compound of canella, brandy, syrup and water.

Todd's real contributions to medicine may be considered under three headings. First, his clinical teaching; second, his medical and paramedical foundations; third, his influence upon education.

#### *Clinical Teaching*

Todd was an enthusiastic teacher who met with considerable success. Having qualified LRCS Dublin in 1831 he came to London and joined the Aldersgate School in September of that year as lecturer in anatomy and physiology. Three years later he moved to Westminster and in 1836, at the age of 27, was elected to the Chair of Physiology and Morbid Anatomy at King's College, Strand. *The Lancet* obituary states that regular lectures on physiology were a rarity at that time, but the attraction which Dr Todd's course offered to the student soon compelled adoption at other institutions. 'His methods of treating the subject was new and many of the subjects themselves novel.' The reason for this rather surprising statement is not far to seek. Physiology was ill-defined in those days; it really meant the study of the healthy body as opposed to morbid anatomy, the study of the diseased body. Todd described himself as an anatomical physician. What he meant was that the science of medicine depended upon the study of anatomy just as much as did the science of surgery. Naked-eye anatomy was not sufficient; with his great friend William Bowman, Todd was largely responsible for popularizing the microscope as an essential instrument of diagnosis. He insisted that accurate diagnosis must always precede treatment, a desideratum by no means universally accepted

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at that time. This teaching was elaborated by Todd's pupil and disciple, Lionel Smith Beale, who is sometimes described as the Father of Scientific Medicine.

Todd's published writings reflect his primary interests. With William Bowman he wrote 'Physiological Anatomy and the Physiology of Man'. Published in 1843, this retained its place as a standard text book for many years. His 'Cyclopædia of Anatomy and Physiology' contained contributions from leading scientists, British and foreign. This was published in four parts between 1835 and 1859. It has been said that 'this cyclopædia did more to encourage and advance the study of physiology and comparative and microscopic anatomy than any book which had previously been published'.

His work on physiological anatomy and on microscopical appearances led Todd to discovery. He was the first to describe hypertrophic cirrhosis of the liver accurately and this is sometimes and not inaptly known as Todd's Disease. Todd's paralysis is the transient postepileptic paralysis of a limb involved in Jacksonian convulsions. Todd's ascending process is the membranous layer of superficial fascia of the anterior abdominal wall, commonly known as Scarpa's fascia. R B Todd undoubtedly described this structure in his Cyclopædia, but it is possible the eponym may be that of his father, Charles Hawkes Todd, who wrote a scholarly article on the layers of abdominal fascia in which he corrected some of Scarpa's views.

R B Todd's most important original work lay in the field of neurology. During his Harveian Oration of 1934, James Collier referred to Todd as 'by far the greatest clinical neurologist Britain has produced until the time of Hughlings Jackson'. Todd defined peripheral neuritis and described the sensory element in sphincter control. His outstanding contribution was his invention of locomotor ataxy, by which he began the separation and classification of spinal diseases, until then all termed paraplegias. His work depended less upon experiment than upon imaginative thinking. Todd was the first to draw attention to the functions of the posterior columns of the spinal cord but he reached his conclusions by pure inductive reasoning. It was left to Charles Brown-Séquard to prove by experiment the truth of Todd's view.

#### *Medical and Paramedical Foundations*

From this brief and incomplete consideration of Todd's clinical work, we pass to his foundations,

a medical school, a hospital, and a reformed system of nursing. While still at Aldersgate, Todd had been appointed physician to the Western Dispensary and the Royal Infirmary for Children. Neither of these appointments offered opportunity for teaching. In 1834 he joined with three others, Hale Thompson, John Burne and George James Guthrie, to found a new school. Between them they bought a site in Great Smith Street for just over £2000. Todd had come from Dublin to London with hardly a penny. The fact that he was able to raise £500 three years later suggests that his practice was quite flourishing from the start. There is no time to describe the controversy which followed the opening of this, the Dean Street School. Suffice it to say that in the end it became attached to Westminster Hospital and Todd is therefore one of the founders of the present Westminster Hospital Medical School.

He taught there for only two years and then removed to King's College, a medical school with no attached hospital. In 1836, when he was appointed to the Chair of Physiology and Morbid Anatomy, the medical professors had already made two attempts to establish a King's College Hospital. These attempts foundered on a strange hallucination which has obsessed all King's College empire builders until almost the present day, the fantasy that the Crown would tamely surrender Somerset House to satisfy their rapacious demands for space. Further, most of the professors had no urgent self-interest in a new hospital because they already held appointments at Middlesex and Charing Cross which provided opportunity for clinical teaching.

Todd, physician to a dispensary and a small non-teaching hospital, had no such opportunity. This was the driving force behind his determination to provide King's College with a hospital. He recognized the absurdity of the Somerset House scheme. His first idea was to establish a special connexion with Charing Cross Hospital, recently rebuilt and enlarged. In fact, a connexion between the two institutions was established and exists to this day, but it very soon became apparent that Charing Cross could not provide clinical facilities for King's College students as well as its own. Todd solved the problem in 1839. He showed that there was urgent need for a new hospital in the terrible slum area which lay to the north of the Strand. Further, he produced a suitable building, the old workhouse of St Clement Danes parish which was to be closed during that summer. In April 1839 the Council of King's College leased the workhouse for a term of sixty years at a rental of £300 a year. It stood in Portugal Street, just behind the Royal College

of Surgeons. On the face of it this was a very attractive situation but, unfortunately, the building could be accurately described as a derelict workhouse overlooking a disused graveyard on the west and Butcher's Row on the east. Medical journals were quick to seize this magnificent opportunity. Two extracts will be enough. Of the founder it was written: 'Dr Todd, we understand, intends to gratify the world with a volume of Meditations among the Tombs.' Of the proposed hospital: 'The locality is fine – shambles on one side and a churchyard on the other – butchers without and within – prayers for the living and for the dead.' Despite this opposition, the first King's College Hospital admitted patients on 1 January 1840, although not officially opened until 15 April. It may be questioned whether our National Health Service would move with such speed in 1973. The urgent need of a hospital in the district was shown by the demand for beds. As early as 1843 it became apparent that a new and greatly enlarged building was essential. On 16 April 1844 Todd and two surgical colleagues informed the Council that adjacent land was available and must be purchased. The foundation stone of the second King's College Hospital was laid on 17 June 1852 and the first wing opened in October 1854. As Willoughby Lyle has written, there is no doubt that Todd was responsible for founding, equipping, and extending King's College Hospital.

Very soon after the first hospital opened, Todd became seriously concerned with the standard of its nursing. He seems to have had reason, for in the Committee of Management minutes of the year 1843 we find a senior nurse applying for *promotion* to the post of assistant cook. Of course Todd was not alone in regarding the nursing position as unsatisfactory, but, being Todd, he decided to do something about it. In 1848 Todd enlisted the help of a few influential friends and held a public meeting at the Hanover Square Rooms. It was decided to form an institution of Sisters who would live under religious discipline but be bound by no vows. Their duty would be to recruit, train, and discipline nurses. So was founded the first Church of England Nursing Sisterhood and, incidentally, the first Anglican religious community to receive episcopal sanction. It took the name of the Sisterhood of Saint John the Evangelist, commonly known as St John's House, and still flourishes as the Community of the Nursing Sisters of St John the Divine. In 1855 Todd, seemingly on his own initiative, invited the Sisterhood to undertake entire responsibility for the nursing of King's College Hospital. After a long and difficult negotiation, the Committee of Management entered into a contract with the

Council of St John's House, and their Sisters and nurses took charge of the wards on Monday, 31 March 1856. In the following year, the Sisters instituted their nurses' training school and continuity has been maintained to this day. Todd's foundation at King's College Hospital is therefore senior by four years to Miss Florence Nightingale's school at St Thomas'.

### *Influence on Education*

Todd's greatest and most wide-spreading contribution to medicine was his reform of education. He has never received full credit for the quite spectacular success which he achieved. His reforms have been described by Willoughby Lyle in his book 'King's and Some King's Men', by Neil McIntyre in his excellent paper on Robert Bentley Todd delivered to the King's College Hospital Historical Society, and rather more fully by F J Hearnshaw in his 'Centenary History of King's College'. But none of these really appreciated the radical revolution that Todd instigated and the reason is that they did not fully consider the state of medical education during the 1820s and 1830s.

We are accustomed to say that the Apothecaries Act of 1815 did more to advance the status of the medical profession than any legislation before or since. We are right, but our approval of the Act itself must not blind us to the imperfections of the rules laid down by the Apothecaries. The regulations demanded that a candidate for their examination must have served a five-year apprenticeship. He was also required to produce certificates that he had attended two courses in anatomy and physiology and two in the theory and practice of medicine. Further, he had to produce evidence that he had walked the wards of a recognized hospital for six months. Later, the surgeons imposed similar regulations, requiring hospital attendance for a year if the candidate was to take the common qualification of College and Hall.

It is almost true to say that the medical student did not exist in England until 1815. He existed in Scotland, but in England he was more likely to be an apprentice or sometimes an unindentured pupil who had attached himself to a particular teacher in return for a fee. These were the only medical trainees in hospitals, known as dressers, clinical clerks, or house pupils. They had well-defined duties, much like those of a modern house officer. All of them, whether house pupils in hospitals or apprentices to private practitioners, worked directly under the supervision of their masters.

The regulations imposed by the Apothecaries under the 1815 Act spelt ruin to this quite well-ordered system. First the regulations caused a proliferation of private schools, good, bad and indifferent, which were nothing but cramming establishments for the Apothecaries' licence. Second, they entailed an influx of students into hospitals which were ill-prepared to receive them. These students existed alongside the regular dressers, clinical clerks and house pupils yet did not share their privileges or duties. Most hospitals laid down that a student walking the wards might follow the physician or surgeon on his rounds and ask questions – that was all. There was no ordered syllabus of instruction. Courses of lectures, as required by the regulations, were offered but these could be and often were an empty formality. It was customary for the student to press a fee into the lecturer's hand at the beginning of the course and to receive his certificate. Whether he actually attended the lectures or not was entirely his own affair.

When Todd was elected to his Chair at King's College in 1836, the only grave cases of indiscipline requiring action by the Council had occurred in the Medical Department, from which it had been found necessary to expel a number of students. Todd determined to remedy this state of affairs. He received warm support from three great principals of the College, Hugh James Rose, John Lonsdale, and Richard William Jelf. He was also fortunate in his timing, because both University College and King's were trying to break loose from thralldom to the Apothecaries. It is not generally recognized that the initial impetus to found a degree-conferring University of London came from the medical professors who were thoroughly dissatisfied with the Apothecaries' regulations. The University was established in 1837 although its medical degrees were not accepted as licences to practise until 1854. But the climate was right for the fulfilment of Todd's ambition which was no less than to transform the medical student into the university undergraduate.

Decisive action was impossible so long as King's was a medical department without a hospital, for the preclinical student did not exist. In April 1842, two years after the hospital started work, Todd addressed an extremely able and powerful open letter, a 32 page pamphlet, to the Principal, John Lonsdale. Here he set out his whole scheme to establish a collegiate system on the Oxford and Cambridge model with residence, discipline, and supervision of studies. His scheme was accepted by the Council but in the matter of residence he achieved only a partial and short-lived success. It was not for want of trying. Between 1843 and 1848 he bombarded the College

Council with no less than four schemes. Two of them were very costly and were turned down. It is hardly necessary to add that one of these extravaganzas depended upon the acquisition of part of Somerset House. The third involved leasing a house in Norfolk Street as a hostel; unfortunately the rent was so high that students could not afford the fees and the venture ended after only three months. Todd then put forward a more ambitious scheme, the erection of a large new building on the College's river frontage. There was considerable difference of opinion as to the cost and desirability of this new structure but, in the end, the Council agreed. Hearnshaw sums up well in these words: 'The council, seeing that Dr Todd would not be happy until he got it, and that until Dr Todd was happy they would have no rest, gave their consent to the carrying out of the plan.' They soon regretted their decision for the College became involved in litigation with the Duke of Norfolk, and the height of the building had to be considerably reduced. In the end it was completed but provided only fourteen sets of rooms for medical students.

The Council accepted Todd's recommendations for proper discipline and supervision of studies. On 10 June 1842 they instituted the office of medical dean, decreeing that each professor should serve in turn for one year. The post was no sinecure. The duties involved interviewing parents and prospective students, observing the deportment of students during lectures, knowing the residence of every student and making himself acquainted with his habits out of hours. Todd served as the first dean from 1842 to 1843 and again in 1845, but we cannot leave this subject without mentioning the name of Dr W A Guy, who held office for nine years from 1849 until 1858. Guy was a firm disciplinarian but a man of real sympathy, equally successful in checking bad behaviour or laziness and in encouraging the industrious plodder. Todd instituted the office but Guy ensured that the office should be an essential of the medical school.

Todd was equally successful in his plea for tuition, George Johnson, later Sir George, being appointed medical tutor in 1843. Nowadays 'medical tutor' implies a tutor in the limited subject of medicine. Johnson was a tutor for medical students, his duty being to supervise studies in all subjects.

One of Todd's major innovations was the establishment of open scholarships. These open medical scholarships at King's College were the first of their kind in Britain and, probably, in the world. Curiously enough very little is known about them and their ultimate fate is shrouded in mystery. There were three, two subscribed by the medical professors and one by friends of the

College. The value was £40 a year for three years and they were conferred exclusively for merit and attainable solely by examination. They were first offered in March 1839.

There is an interesting and suggestive condition attached to these scholarships. A scholar was compelled to attend a course in Divinity and he also had the privilege of attending any course in any department of the College without further payment. This probably reveals a deliberate intention to encourage the student to widen the scope of his studies. If we accept that such was the intention and recall that the medical professors were anxious to institute a degree-conferring University, we may perhaps conclude that the more intelligent medical teachers of the 1840s were as worried as some of us are today by the emphasis laid upon purely technical aspects of medicine.

When Todd joined the staff of King's College in 1836, the medical department contained 42 students and was reputed to be the worst in London. The Council had actually found it necessary to issue a public denial of the rumour that it was to be closed. When he left the College in 1853, the department had the name of being one of the best of the London schools with 169 students on the books. Such is the measure of his success. Sadly, he died before his success became a triumph during that wonderful decade of the 1860s when deputations came from all over Europe to study the nursing methods and the organization of the hospital which he had founded. At least he was spared the agony of seeing his work brought to a miserable decline by internecine quarrels at the end of that decade. But Todd was a forceful personality; had he lived he might have prevented the bitter struggle for power which nearly ruined his hospital, his nursing Sisterhood, and his medical school.

Todd was a restless reforming genius, eternally bombarding councils and committees with his revolutionary ideas. Such a man has his followers but inevitably makes enemies. Todd was the subject of virulent abuse both during his lifetime and after his death. Perhaps this abuse accounts for the picture of the drunken physician attending his equally drunken patients and has obscured the real contributions which he made to medical advance.

#### REFERENCES

- Hearnshaw F J C (1929) Centenary History of King's College. Harrap, London  
*Lancet* (1860) i, 151  
 Lyle H W  
 (1935) King's and Some King's Men  
 (1950) An Addendum. Oxford University Press, London  
 McIntyre N (1956) *King's College Hospital Gazette* 35, 71  
 Poynter F N L ed (1961) *The Evolution of Medical Practice in Britain*. Pitman, London

## Criminal Insanity: Bethlem to Broadmoor

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On 2 August 1786 Margaret (known as Peg) Nicholson attempted to stab King George III with an elderly dessert knife as he got out of his carriage at St James's; and on 15 May 1800 James Hadfield fired twice at the king as he entered the Royal Box at the Drury Lane theatre to see a performance of 'She wou'd and she wou'd not'.

The first of these assassination attempts was half-hearted and ill prepared, and Peg Nicholson was quickly apprehended, and commended to humane treatment by the king. Over the next few days she was investigated by the Privy Council who, assisted by two members of the Monro family and by Peg herself, found her to be insane; and finally on the Secretary of State's order she was conveyed to Bethlem Hospital to be confined for life.

Her case created no new precedents, and illuminated no old points of law – though it did elicit from Dr Monro the opinion that it was quite possible to be insane and still take a hand at whist. It differed only in notoriety, and not in character, from others which had occurred since at least the early 17th century; for patients had long been sent to Bethlem by warrant of the sovereign or of some branch of central administration. Most frequently they would be the responsibility of the Board of Green Cloth.

As a manifestation of the Privy Council, the 'Green Cloth' acted as a court with jurisdiction 'within the verge', that is, within twelve miles of the sovereign's household. Thus many of the people who hung about royal palaces and royal persons committing or threatening acts ranging from petty annoyance to treasonable attack, from offering seditious literature to passers-by to offering themselves in marriage to royal princesses, arrived on Bethlem's doorstep with a letter of recommendation from the Board of Green Cloth. The following is typical:

'Gentlemen.

Wee herewith send you the Body of Richard Stafford, who is Distracted, & hath been very troublesome to their Ma[jes]ties Court at Kensington, By Dispersing Books & Pamphletts full of Enthusiasme and Sedition. Wee desire that you will receive him into your Hospittall of Bethlem, and to Treat Him in such